IN THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph beginning at pages 15, line 19, through page 17, line 13 with the following rewritten paragraphs as follows:

-- Fig. 2 is a view showing an example of a case where data such as E-mail having a small size and taking a short communication time is intermittently transmitted and received (from a base station to a mobile station, or from the mobile station to the base station). Incidentally, in the example of Fig. 2, it is assumed that only one radio channel can be connected between the base station and mobile stations, and there are two users of a user 1 and a user 2 in a cell managed by the base station. The transmission of a packet A (202) of the user 1 to the base station is completed at time t11, and the user 1 does not transmit another packet B (203) until time t15. At this time, if an interval between t11 and t14 is set to be long as compared with a communication time of the packet A between t10 and t11, that is, if an inactivity timer T0 (201-1 through 201-2) set for the user 1 is set to be long, although transmission/reception of data is not carried out, the radio channel continues to be connected for a long time. Even if the user 2 attempts to transmit a packet C (204) to the base station in such a state at time t12, since there is no free radio channel, a radio channel can not be connected between the base station and the mobile station.

Fig. 3 is a view showing an example of a case where data, such as stream data of moving picture etc., having a large size and taking a considerable communication time is transmitted and received (from a base station to a mobile station, or from the mobile station to the base station).

When such data exceeds a maximum length of a packet size which can be transmitted and received on a radio channel, the stream data is divided into a plurality of packets and is transmitted and received. Besides, a transmission/reception interval of the packet is not constant according to the processing capacity of a packet transmission source, the state of a radio channel, and the like. In the example of Fig. 3, it is assumed that stream data is divided into packet data of a packet D-1 (302-1), a packet D-2 (302-2), and a packet D3 (302-3). When the transmission of the packet D-1 to the mobile station is completed at time t21, next, the packet D-2 is transmitted. At this time, if an interval from t21 to t22 is set to be short as compared with a communication interval from t21 to t23 between the packet D-1 and the packet D-2, that is, a set value of an inactivity timer T0 (301-1 through 301-3) set for the user 1 is set to be short, although the base station does not complete the transmission of all blocks of data, the state is changed to the dormant state. Thus, each time when an attempt to transmit non-transmitted data is made, it becomes necessary to again connect the radio channel to change the dormant state to the connected state. By this, a time until completion of transmission of all data is delayed, and eventually, the radio channel is occupied for a long time. --

Please replace the paragraphs beginning on page 20, line 11 through page 21, line 24 with the following rewritten paragraph as follows:

-- Fig. 7 is a view showing a state of a radio channel in a case where a set value of an inactivity timer is set to be short for data having a long non-communication time as compared with a data communication time, that is,

data having a small size and taking a short communication time. Incidentally, in the example of Fig. 7, it is assumed that only one radio channel can be connected between the base station and mobile stations, and there are two users of a user 1 and a user 2 in a cell managed by the base station. The transmission of a packet A (702) of the user 1 to the base station is completed at time t31, and the user 1 does not transmit another packet B (703) until time t36. Next, the user 2 attempts to transmit a packet C (704) to the base station. At this time, since the set value of the inactivity timer T1 (701-1 through 701-3) is set to be short, the radio channel between the mobile station of the user 1 and the base station is disconnected at time t32, and the mobile station of the user 2 can newly connect a radio channel at time t33. Besides, when the user 1 attempts to transmit another packet B (703) to the base station at time t36, since the radio channel between the mobile station of the user 2 and the base station is already disconnected at time t35, the mobile station of the user 1 can newly connect a radio channel.

Fig. 8 is a view showing a state of a radio channel when a set value of an inactivity timer is set to be long as compared with a non-communication time for each transmission/reception of data divided into a plurality of packets, in a case where data such as stream data having a large size and taking a considerable communication time is transmitted and received. Incidentally, also in the following, similarly to Fig. 3, it is assumed that the stream data is divided into packet data of a packet D-1 (802-1), a packet D-2 (802-2) and a packet D-3 (802-3). The transmission to the mobile station of the packet D-1 (802-1) of the user 1 is completed at time t41, and an inactivity timer T2 (801-1 through 801-2) is set. Next, the next packet D-2 (802-2) is transmitted at

time t42. In Fig. 8, since the next packet 20 D-2 (802-2) is transmitted before the inactivity timer T2 (801-1) expires, the transmission/reception of the data can be continued without carrying out a disconnection processing of the radio channel and a reconnection processing of the radio channel.--

Please replace the paragraph beginning at page 23, line 5 though page 24, line 10, with the following rewritten paragraph as follows:

-- Fig. 10 is a view in which a base station carries out data transmission to an ISP (WWW server) and a WAP support server according to a connection destination type field value added to a header of data by a mobile station in the present invention. The connection destination type field is used for setting of an inactivity timer value according to the data type and is used so that a base station/mobile switching center identifies an apparatus to which a packet received from the mobile station should be transmitted as shown in Fig. 10. From the correspondence table of Fig. 9, a packet with a connection destination type field value of 0 is transmitted to the ISP (WWW server) 1005-1 (1005-2), and a packet with a connection destination type field value of 1 is transmitted to the WAP support server 1006-1 (1006-2). In the example of Fig. 10, a mobile station 1003-1 adds a header in which the connection destination type field value is set to 0, to data 1007-1 from an ~~for the~~ Internet application 1001-1 (1001-2), and transmits a packet 1008 to a base station/mobile switching center 1004-1. When the base station/mobile switching center 1004-1 receives the packet 1008, since the connection destination type field value is 0, it transmits data 1007-2 to an ISP 1005-1. In the case of data 1009-1 of WAP support application 1002-1 (1002-2), a mobile station 1003-2 adds a

header in which the connection destination type field value is set to 1, and transmits a packet 1010 to a base station/mobile switching center 1004-2. When the base station/mobile switching center 1004-2 receives the packet 1010, since the connection destination type field value is 1, it transmits data 1009-2 to a WAP support server 1006-2. Incidentally, in the above, it is assumed that 0 is automatically written in the field of the header when application software of the mobile station 1003 is the internet, and 1 is automatically written when it is E-mail. The same applies to the case where the base station carries out data transmission to the mobile station. --

Please replace the paragraph beginning on page 29, line 12, with the following rewritten paragraph as follows:

-- Fig. 14 shows an example of a correspondence table 1401 of a connection destination type and an inactivity timer value varied for each user. In the case where a different 15 inactivity timer is set for each user, the correspondence table 1401 as shown in Fig. 14, different from Fig. 9, is stored in the management table 508 of the memory 507 of Fig. 5.--